

ABSTRACT OF THE DISCLOSURE

A method of broadening a dynamic range is applied to a solid-state image sensor of the type including photodiodes each being divided into a main and a subregion different in photosensitivity from each other. While the quantity of light to be incident on a photodiode is reduced, a signal charge is read out only from the main region of the photodiode. The signal charge is digitized and then written to two image memories. Digital signals thus stored in the image memories are respectively amplified by white balance gain circuits with different gains. The resulting digital signals are combined by an image synthesizer. The method can therefore broaden the dynamic range of the image sensor by using only the main regions of the photodiodes.